Friday, September 28, 2018

Arkansas, Louisiana, New Mexico, Oklahoma, Texas, and 66 Tribal Nations

\*Please note: All articles are available in the attached PDF.

### 1 – A look at what led to 2017's packed major hurricane season, and why 'we will see more', Baton Rouge Advocate, 9/27/18

https://www.theadvocate.com/baton\_rouge/news/article\_ac2f293e-c288-11e8-b8fe-ab7e26ef726c.html The Atlantic's warmer waters triggered the unusual number of major hurricanes last year, according to a new study that predicts the region could see a couple of extra whopper storms each year by the end of the century.

# 2 - Bloomfield contracts with firm for wastewater facility designs, Farmington (NM) Daily-Times, 9/27/18 <a href="https://www.daily-times.com/story/news/local/bloomfield/2018/09/27/bloomfield-moves-forward-designs-new-wastewater-facility/1445894002/">https://www.daily-times.com/story/news/local/bloomfield/2018/09/27/bloomfield-moves-forward-designs-new-wastewater-facility/1445894002/</a>

The city of Bloomfield is contracting with an Albuquerque-based engineering firm for designs of the new wastewater treatment plant, which the city must build under an administrative order from the U.S. Environmental Protection Agency.

### 3 - New Texas petrochemical projects add millions of tons of greenhouse gas pollution, report finds, Houston Chronicle, 9/27/18

https://www.houstonchronicle.com/news/houston-texas/houston/article/New-Texas-petrochemical-projects-add-millions-of-13264492.php

Texas, the United States' leading emitter of greenhouse gases, has approved 43 petrochemical projects along the Gulf Coast since 2012 that will add millions tons of greenhouse gas pollution to the atmosphere, according to an environmental study released this week.

#### 4 – Wehrum outlines playbook for Obama rule rollbacks, E&E News, 9/27/18

https://www.eenews.net/greenwire/2018/09/27/stories/1060099949

EPA is poised to move ahead as early as next week with a formal proposal to reconsider its 2012 power plant mercury rule, according to agency air chief Bill Wehrum.

#### 5 - A Drifting Weedkiller Puts Prized Trees At Risk, Texas Public Radio, 9/28/18

http://www.tpr.org/post/drifting-weedkiller-puts-prized-trees-risk

From Mississippi to Illinois, people have noticed trees or other kinds of wild vegetation that show signs of damage from dicamba. The Environmental Protection Agency now has to decide whether farmers should be allowed to keep using this chemical in quite the same way. The agency's previous approval expires at the end of the year.

#### 6 – Feed Mill Fire in Texas Forces Residents to Evacuate, Powder & Bulk Solids, 9/27/18

https://www.powderbulksolids.com/news/Feed-Mill-Fire-in-Texas-Forces-Residents-to-Evacuate-09-27-2018

A fire at a feed mill in Winnsboro, TX on Tuesday prompted officials to order those living within a half-mile of the facility to evacuate their homes amid concerns that smoke and burning ammonium nitrate could cause harm, the City of Winnsboro said in statement.

<sup>\*</sup>To receive the Daily News Digest in your inbox, email R6Press@epa.gov.

#### 7 – After Ranchos water failure, 'don't bother us anymore', Taos (NM) News, 9/27/18

https://www.taosnews.com/stories/ranchos-water-failure-leaders-quiet-on-details,52069
Following a weeklong water outage in Ranchos de Taos that left up to 750 people with little or no water, the leadership of the small water system is keeping quiet about details surrounding the outage.

#### 8 - Lawsuit challenges EPA approval of Oklahoma's coal ash program, Reuters, 9/27/18

https://www.reuters.com/article/usa-oklahoma-coal/lawsuit-challenges-epa-approval-of-oklahomas-coal-ash-program-idUSL2N1WD23N

Three environmental groups have asked a federal court to vacate the Environmental Protection Agency's approval of a state-run coal ash permit program in Oklahoma, arguing that the state's program will not adequately protect the environment.

#### 9 - "WOTUS": A Tale of Two Rules While Litigation and Rulemaking Continue, Texas Observer, 9/27/18

https://www.natlawreview.com/article/wotus-tale-two-rules-while-litigation-and-rulemaking-continue
On August 16, 2018, the U.S. District Court for the District of South Carolina issued a nationwide injunction on a
Trump administration rule that has been preventing the 2015 rule that revised the definition of "waters of the United States" ("WOTUS Rule") under the Clean Water Act ("CWA") from taking effect.

#### 10 - Drought lingers across New Mexico, Albuquerque Journal, 9/27/18

https://www.abqjournal.com/1226678/drought-lingers-across-new-mexico-2.html

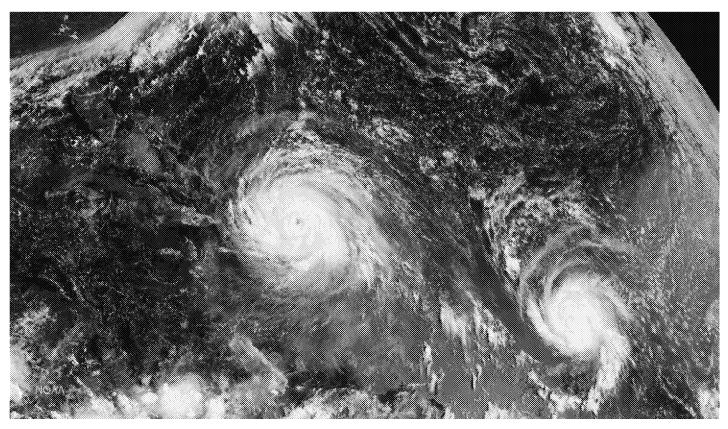
The Rio Grande is again looking puny where it crosses through Albuquerque as persistent drought continues to afflict the Southwest.

11 - Wetland damage from roseau cane plague visible in satellite images, New Orleans Times-Picayune, 9/27/18 <a href="https://www.nola.com/environment/index.ssf/2018/09/wetland">https://www.nola.com/environment/index.ssf/2018/09/wetland</a> plague damage in missi.html#incart river index About half of the sprawling marshland in the lower Mississippi River Delta has weakened or died in recent months, according to an Army Corps of Engineers assessment of the roseau cane die-off plaguing south Louisiana.

https://www.theadvocate.com/baton\_rouge/news/article\_ac2f293e-c288-11e8-b8fe-ab7e26ef726c.html

# A look at what led to 2017's packed major hurricane season, and why 'we will see more'

By SETH BORENSTEIN, AP Science Writer SEP 27, 2018 - 2:08 PM



FILE - This Thursday, Sept. 7, 2017 satellite image made available by NOAA shows the eye of Hurricane Irma, left, just north of the island of Hispaniola, with Hurricane Jose, right, in the Atlantic Ocean. Six major hurricanes -- with winds of at least 111 mph (178 kph) -- spun around the Atlantic in 2017, including Harvey, Irma and Maria which hit parts of the United States and the Caribbean. (NOAA via AP)

Warm waters boosted 2017's major hurricane tally, study says

WASHINGTON (AP) — The Atlantic's warmer waters triggered the unusual number of major hurricanes last year, according to a new study that predicts the region could see a couple of extra whopper storms each year by the end of the century.

Six major hurricanes — with winds of at least 111 mph (178 kph) — spun around the Atlantic last year, including Harvey, Irma and Maria which hit parts of the United States and the Caribbean. Since 2000, the Atlantic has averaged three major hurricanes a year. Before that the average was closer to two.

#### Story Continued Below

It may go up to five to eight major hurricanes a year around the year 2100, according to a study in Thursday's journal Science .



### 'We've saved a lot of lives': Cajun Navy members recount rescue efforts in Florence aftermath

"We will see more active hurricane seasons like 2017 in the future," said lead author Hiro Murakami, climate scientist and hurricane expert at the National Oceanic and Atmospheric Administration.

So far this year, though, only one Atlantic hurricane, Florence, has reached major status.

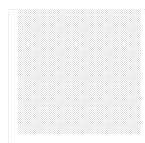
Warm water acts as fuel for hurricanes. Water has to be at least 79 degrees (26 degrees Celsius) for a storm to form. The warmer the water, the more it can resist forces that would cause it to weaken, said University of Miami hurricane researcher Brian McNoldy, who wasn't part of the study.

Murakami found that a combination of natural conditions and man-made climate change made the waters warmer in one key area, which caused more major storms. That area is essentially a large box from south of Florida and north of South America, stretching all the way east to Africa.

Some of the strongest Atlantic hurricanes form off the coast of West Africa, then chug west toward the Caribbean and the U.S. East Coast.

Water in that large box — the main hurricane development region — averaged 0.7 degrees (0.4 degrees Celsius) warmer than normal for the entire 2017 season, which is unusual for a sixmonth time period, Murakami said.

Murakami's study used computer simulations to isolate different climate conditions. Although his research showed both natural and human-triggered causes from the burning of coal, oil and gas, Murakami said he couldn't separate them enough to see which was bigger.



### Never forget the rain: Antiquated hurricane rating system causes dangerous confusion

He used the computer models to look into the future. The Atlantic is projected to warm faster than the rest of the world's oceans. That difference is why Murakami said the number of major storms will probably increase by two or more on average.

Some outside experts had issues with parts of Murakami's study.

McNoldy said it makes sense that the unusual warm water was to blame in 2017, but he wasn't quite ready to point the finger at global warming.

"Hurricane seasons don't just keep getting more active as the climate warms though. There is enormous variability," McNoldy said in an email.

Kevin Trenberth of the National Center for Atmospheric Research faulted Murakami's study for not taking into account the large increase in ocean heat in deeper areas, which he said is also due to climate change.

Princeton University's Gabriel Vecchi said some computer simulations don't show the Atlantic warming fastest, so it's not quite as certain that there will be more major storms there in the future.

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Follow Seth Borenstein on Twitter: @borenbears . His work can be found here.



## New Texas petrochemical projects add millions of tons of greenhouse gas pollution, report finds

Nick Powell

Sep. 27, 2018 Updated: Sep. 27, 2018 7:36 p.m.

Caught in the Storm: Extreme Weather Hazards

CSB Safety Video about the 2017 Fire at the Arkema Chemical Plant in Crosby, Texas, following Hurricane Harvey Video: Houston Chronicle

Texas, the United States' leading emitter of greenhouse gases, has approved 43 petrochemical projects along the Gulf Coast since 2012 that will add millions tons of greenhouse gas pollution to the atmosphere, according to an environmental study released this week.

Released by the Environmental Integrity Project, a Washington, D.C.-based, nonpartisan environmental watchdog group, the report examined state records that detailed which plants in Texas and Louisiana applied for permits allowing an increase in greenhouse gas emissions from 2012 through 2018.

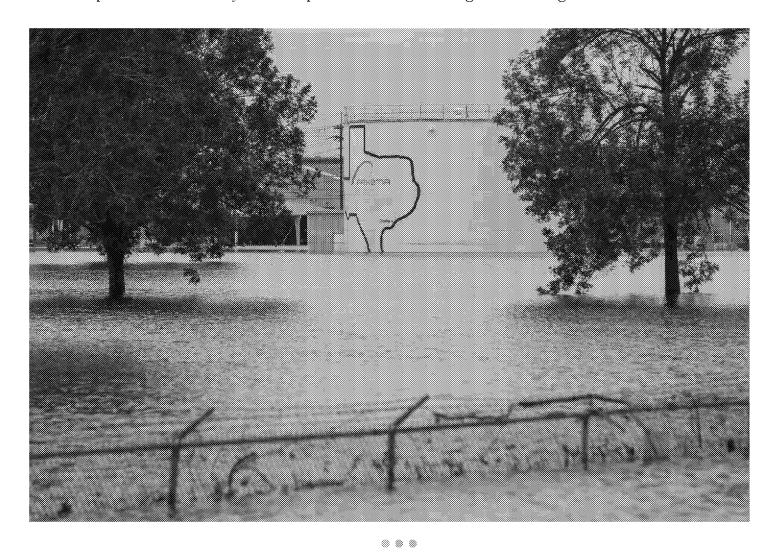
Overall, 74 permits have been issued since 2012 in the two states to add 134 million tons of pollution to the atmosphere. That amount of pollution over a six-year span is equivalent to 29 new coal-fired power plants running around the clock, the report said.

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Eric Schaeffer, executive director of the Environmental Integrity Project, said the projects highlighted in the study are part of a petrochemical construction boom that dovetails with the expansion of liquid natural gas (LNG) terminals, refineries, ethylene crackers, and chemical and fertilizer plants unleashed by the cheaper method of fracking for natural gas and oil.



This Aug. 30 photo shows flooding at the Arkema chemical plant in Crosby, northeast of Houston. The U.S. Chemical Safety Board said that crews for Arkema worked "to the best of their ability" to keep equipment that cooled and stabilized its organic peroxides from losing power. But Arkema's emergency plans hadn't accounted for damage caused by ...

Photo: Godofredo A. Vasquez, MBO / Associated Press

"The first thing that grabbed our eyes starting several years ago, is how big the greenhouse gases are," Schaeffer said. "We're used to thinking of gas instead of coal — 'gas is better' — if you look at

it with a narrow lens, that's true, but if you're looking at these big LNG terminals, you're talking about a greenhouse gas load that's like having two very large coal plants."

The worst polluting offender in Texas was the Corpus Christi Liquefaction LNG Terminal in San Patricio County, which emitted nearly 6 million tons of carbon dioxide from 2012 through 2016.

In Harris County, the biggest polluters include Flint Hills Resources Houston Chemical (2.1 million tons of carbon dioxide emissions), Chevron Phillips' Cedar Bayou Plant (1.6 million tons), ExxonMobil's Baytown Olefins Plant (1.4 million tons), and Equistar's Channelview plant (1.4 million tons).

The ExxonMobil Baytown Olefins Plant is notable for being forced in 2017 to pay \$20 million in fines for releasing 10 million pounds of pollutants into the air from the chemical complex.

A 2017 report released by the American Lung Association ranked Houston as the 12th-worst city for ozone pollution out of 228 metropolitan areas, the 16th-worst city for year-round particle pollution out of 186 metropolitan areas, and the 49th-worst for 24-hour particle pollution.

### RELATED: Hurricane Harvey-caused water and air pollution likely far higher than residents realize

Bakeyah Nelson, executive director of Air Alliance Houston, noted that the increase in greenhouse gas pollution from these newer projects exacerbate Houston's pollution problems.

"It's just another example of having a lax regulatory environment when it comes to these issues. It's another example of how health is not taken into consideration of the communities that are most impacted by these facilities. To me, it's par for the course," Nelson said.

The uptick in greenhouse gas emissions from these new plants places the permitting process under a microscope.

Beginning in 2014, the Environmental Protection Agency handed off greenhouse gas permitting to the Texas Commission on Environmental Quality. Since 2011, the EPA requires permits for new construction projects that emit at least 100,000 tons of greenhouse gases and existing facilities that increase their emissions by at least 75,000 tons per year, even if they do not exceed thresholds for other pollutants.

Texas later sued the EPA in federal court to prevent the regulation of greenhouse gases, only to have a federal appeals court side with the agency in 2013. Coincidentally, Judge Brett

Kavanaugh, the current nominee for the U.S. Supreme Court, wrote a dissenting opinion in that ruling.

Schaeffer, a former director of enforcement at the EPA, said that the federal agency can do a better job in its oversight capacity, even with the state's environmental quality commission handling the issuing of permits. He said most of the petrochemical companies ignore emission limits because of the EPA's lax enforcement.

"There really aren't any controls being written into these permits," Schaeffer said. "At the operational level I don't think it's taken very seriously, and it should be. More can be done to keep these emissions down. That's not going to solve all the problems, I realize, but it certainly can help."

Nelson also noted TCEQ's record of failing to penalize the state's worst polluters. A 2017 Environmental Integrity Project and Environment Texas report found that Texas imposed penalties on less than 3 percent of illegal air pollution releases during industrial malfunctions and maintenance from 2011 through 2016, even though these incidents emitted more than 500 million pounds of pollutants.

"It just takes environmental organizations to sue (TCEQ) for these violations in order to get any type of enforcement or compliance," Nelson said.

Schaeffer said he is also concerned that many of the newer petrochemical plants are situated in coastal areas prone to flooding and damage from major storms. Since 2016, state regulators in Louisiana and Texas have approved 31 new oil, gas, and petrochemical projects along the Gulf Coast that will add another 50 million tons of greenhouse gas pollution equal to 11 new coal-fired power plants.

The Houston Chronicle reported that the flow of toxic chemicals from Hurricane Harvey in 2017 led to 150 million gallons of raw sewage and industrial discharge spilling into communities and waterways. About 100 companies, including Valero Energy, ExxonMobil and Arkema, reported spilling chemicals.

"You can't look backwards at the history over the last 50 or 100 years and rely on that to predict the future," Schaeffer said. "That's not where global warming is taking us. You need to plan with the idea that there's gonna be heavy, heavy weather events and that's going to put a lot of the infrastructure at risk if it's not built right and sited correctly."

nick.powell@chron.com

#### AIR POLLUTION

#### Wehrum outlines playbook for Obama rule rollbacks

Sean Reilly, E&E News reporter Published: Thursday, September 27, 2018



EPA air chief Bill Wehrum and Bill Charmley, a senior career official (on right), faced probing questions yesterday at a meeting of the agency's Clean Air Act Advisory Committee. Sean Reilly/E&E News

EPA is poised to move ahead as early as next week with a formal proposal to reconsider its 2012 power plant mercury rule, according to agency air chief Bill Wehrum.

Agency officials have been "working very hard" on the draft rule to revisit what are officially known as the Mercury and Air Toxics Standards; they hope to send a proposal to the White House Office of Management and Budget for review within the next few days, Wehrum told reporters yesterday after speaking at an afternoon meeting of the agency's Clean Air Act Advisory Committee.

While the agency is still working on the exact contours, the proposal could address EPA's 2000 determination that it was "appropriate and necessary" under the Clean Air Act to regulate releases of mercury and other hazardous pollutants from coal-fired power plants, along with some implementation aspects, Wehrum indicated

Wehrum also voiced hope that once the proposal goes to OMB's Office of Information and Regulatory Affairs, the review could be completed quickly enough to proceed with public release in the "relatively near future."

Asked whether power producers, which largely came into compliance with the regulations two years ago, should expect to see any changes to specific emissions standards, he replied only, "Stay tuned."

Wehrum also confirmed yesterday that officials are mulling repeal of another Obama-era rule that ordered states to end waivers for emissions violations related to plant startups, shutdowns and malfunctions, often known in regulatory shorthand as "SSM."

He acknowledged a "very robust discussion" within EPA's air office surrounding the 2015 rule that required three dozen states to rewrite their state implementation plans (SIPs) to end those exemptions.

As E&E News reported earlier this week, a July entry in Wehrum's official calendar showed a meeting held to discuss "initiating" the rule's withdrawal (*E&E News PM*, Sept. 25). Yesterday, however, he hedged when queried if the agency plans to take that step.

"We're not sure yet," he said after noting that the final decision will rest with acting EPA chief Andrew Wheeler.
"That's one of the things we're talking about." But Wehrum said he disagreed with some facets of the rule.

The agency has no timetable for a decision, he said, adding that "the conversation is not as far along as some of the other things we've been working on."

The impromptu news conference came just after he spoke to the committee, which he chairs and is charged with providing outside advice on Clean Air Act implementation issues. Its members, numbering almost 40, include representatives of industry, labor and environmental groups, along with state and local government officials and academics.

The meeting was the committee's first since December, not long after Wehrum rejoined EPA as air chief. Then, he outlined plans to take a more targeted regulatory strategy, in contrast with the sweeping game plan employed during his previous stint in the air office during the George W. Bush administration.

"We've been following that strategy, and I think to good effect," Wehrum said in outlining the agency's work to ease application of the New Source Review pre-construction permitting program and other endeavors. Following up on a recently released "road map" for EPA's regional haze program, Wehrum said it had been "severely misapplied" under the Obama administration. Beyond the goal of improving visibility in national parks, Wehrum said, it became part of a strategy directed at coal-fired power plants. "We're not going to do that anymore," he said.

Also speaking to the committee were two career air officials, Bill Charmley and Kevin Culligan, who respectively discussed the Trump administration's proposals to roll back Obama-era vehicle fuel efficiency standards and to replace President Obama's Clean Power Plan, which was geared toward reducing greenhouse gas emissions from the coal-fired power sector.

In response to sometimes critical questions, all three generally stressed that the administration is working within the framework of applicable laws and remains open to changes.

As he has in the past, Wehrum conceded the particular challenge of revisiting the Mercury and Air Toxics Standards, given that they have long since gone into effect.

This summer, a coalition of utility trade groups urged him to leave the standards intact, albeit possibly with some technical changes (*Greenwire*, July 11). Last month, two senior senators told him in a letter that reconsideration of the standards "doesn't make sense" (*E&E Daily*, Aug. 27).

"I've had many people come through my office and say, 'You should leave well enough alone," Wehrum told the committee yesterday.

But he pointed to the Supreme Court's 2015 ruling that EPA had not properly considered compliance costs when making the "appropriate and necessary" determination. While the Obama administration the next year produced a "supplemental finding" that reaffirmed its earlier decision, "we don't necessarily agree with that," Wehrum told reporters later.

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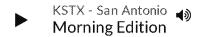


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### A Drifting Weedkiller Puts Prized Trees At Risk

By DAN CHARLES (/PEOPLE/DAN-CHARLES) • 16 HOURS AGO

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(http://mediad.publicbroadcasting.net/p/shared/npr/styles/x\_large/nprshared/201809/651548872.jpg)

The edges of this sycamore leaf are turned upward into a cuplike shape, the typical sign of exposure to dicamba.

DAN CHARLES/NPR



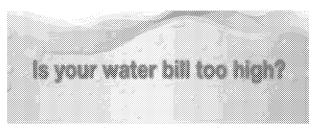
Originally published on September 28, 2018 1:12 am



Mike Hayes and I are sitting on the patio of Blue Bank Resort (http://www.bluebankresort.com/), the business he owns on Reelfoot Lake, in Tennessee. The sun is going down. It's beautiful.

What really catches your eye here is the cypress trees. They line the lake, and thousands of them are standing right in the water. Hayes tells me that they are more than 200 years old.





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more Simila Glacking, con-

They were here in 1812, when the lake was formed: A cataclysmic earthquake shook this area, the land dropped, and water from the Mississippi River rushed in and covered 15,000 acres of cypress forest. Yet these trees survived and became a home for fish and birds.

"The fishing's around the tree; the eagles nest in the tree, the egrets. So much wildlife all out in the trees," he says. "The trees define Reelfoot Lake."

Last year, though, Hayes noticed that the trees didn't look right. Their needles were turning brown. Some were curling. "Something was going on that never happened before," he says.

Neighbors were talking about it. Everybody had a theory: disease; drought; insects. "They thought of other things, but when it came down to it, it was a drifting chemical," Hayes says.

The chemical is called dicamba. It's a weedkiller, and it blew in from nearby soybean and cotton fields.

Similar things have happened across the Midwest and Mid-South over the past two years. From Mississippi to Illinois, people have noticed trees or other kinds of wild vegetation that show signs of damage from dicamba. The Environmental Protection Agency now has to decide whether farmers should be allowed to keep using this chemical in quite the same way. The agency's previous approval expires at the end of the year.

Many farmers have come to rely on dicamba. In the area around Reelfoot Lake, the vast majority of farmers use the chemical, says Jason Hamlin, a consultant who works with farmers in west Tennessee and southeastern Missouri.

Farmers have turned to dicamba because it still works; many other herbicides don't anymore, because weeds have become resistant to them. Dicamba is a new option for farmers growing soybeans and cotton because the big seed company Monsanto, which is now owned by Bayer, created new genetically modified versions of these crops that can tolerate dicamba. This means that farmers can spray this chemical and the weeds die, but the crops are fine. Farmers got permission to spray dicamba on their new, tolerant crops two years ago.

"Nobody wants it to get on their neighbor's crop, the tree line, the lake, the state park, whatever; nobody wants that. But they have to have a tool to control their weeds or they can't farm, you know?" says Hamlin.

Dicamba has long been known as a chemical that's hard to control. It can evaporate from the soil or plants where it was sprayed, and that vapor can drift for miles. But both Monsanto and the chemical company BASF developed new "low volatility" formulations to solve this problem.

The problem resurfaced, though. In each of the past two years, drifting dicamba has been blamed for damaging more than 1 million acres of neighboring crops, mostly soybeans. It has provoked fights between farmers and set off a huge controversy.

Receiving less attention, so far, is the damage to wild plants. Few people were watching them quite so closely.

"I've never really paid attention to trees," says Tom Burnham, a farmer in Mississippi County, Ark. "But in the last two or three years I've actually started looking at trees in people's yards and everything, and you know it's amazing, once you start looking, what you see."

So I started looking. Greg Allen, an agricultural extension agent with the University of Tennessee, took me on a little drive down a country road a few miles from Reelfoot Lake. We passed a big field of soybeans on our right. On our left was woodland.

I didn't really know what to look for. I asked Allen what caught his eye. He rolled down his window and gestured toward a nearby tree. "Well, one thing that would've caught my eye is that sycamore, and them itty-bitty leaves," he says.

Normal sycamore leave are big and flat; these are curved into the shape of small cups, a sign of exposure to dicamba. "And you can see it goes all the way to the top," he says. "That's a 30- or 40-foot tree."

I realize that the leaves of almost every sycamore tree nearby show similar symptoms. Other trees, though, do not. Dicamba affects various plant species very differently. Based on what scientists have observed this past year, the tree species that seem most sensitive to dicamba include sycamore, cypress, Bradford pear, and white oak.

The amount of damage also changes from place to place. In Iowa, forestry experts haven't seen many signs of exposure to dicamba. In Arkansas, though, a scientist that state officials hired to conduct a survey saw dicamba-damaged trees in every town that he visited across the northeastern part of the state.

It's now up to the EPA to decide just how much protection these trees need, balancing that against the desire of many farmers to keep using dicamba.

There are billions of dollars at stake. Monsanto is arguing that the government can't take this tool away from farmers. If used properly, the company says, dicamba doesn't hurt anything but weeds.

Back at Reelfoot Lake, Hayes says his prematurely brown cypress trees are evidence that this isn't true. He thinks state politicians are ignoring the problem — in part because they're scared of Monsanto.

"The problem with dicamba is, there's so much money behind it," he says with a deep sigh. "I've never seen so many people run from a problem so bad in my life. It really hurts to lose what we're about to lose."

Dicamba hasn't killed the trees in the lake, but Hayes is convinced that the chemical has weakened them. And new cypress trees can't sprout and grow in the water. The trees that make Reelfoot Lake what it is — if they die, they're gone forever, he says.

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#### **AUDIE CORNISH, HOST:**

This past summer, from Mississippi to Illinois, people noticed a curious phenomenon - trees with curled-up leaves or browned needles. That damage apparently came from a chemical, a weed killer that's now popular among farmers. And the Environmental Protection Agency now has to decide whether farmers should be allowed to keep using it. NPR's Dan Charles has the story.

DAN CHARLES, BYLINE: Mike Hayes and I are sitting on the patio of Blue Bank Resort, the business he runs alongside Reelfoot Lake in Tennessee. The sun's going down. The lake is beautiful. But what really catches your eye is the trees standing right in the water along the edges of the lake. Hayes tells me these are 200-year-old cypress trees.

MIKE HAYES: The cypress trees out in the lake - thousands of them. And they're all the trees that was here when the lake was formed.

CHARLES: It was formed by a cataclysmic earthquake in 1812. The earth shook. The land here dropped. And water from the Mississippi River rushed in and covered 15,000 acres of cypress forest. Yet these trees survived and became a home for fish and birds.

HAYES: You know, the fishing's around the tree. The eagles nest in the tree, the egrets. So much wildlife all out in the trees. It just - the trees define Reelfoot Lake.

CHARLES: Last year, though, Hayes noticed the trees didn't look right. The needles were turning brown.

HAYES: Like a burnt brown, curling - you know, something was going on that never happened before.

CHARLES: People started talking. Everybody had a theory - disease, drought, insects.

HAYES: They thought of other things. But when it came down to it, it was a drifting chemical.

CHARLES: A chemical called dicamba. It's a weed killer. And it was blowing in from nearby soybean and cotton fields.

JASON HAMLIN: Ninety percent of the growers use dicamba.

CHARLES: Ninety percent.

HAMLIN: Yes. That's an estimate. I mean, there's nothing exact, but it's a vast majority.

CHARLES: This is Jason Hamlin. He's a crop consultant, helps farmers around here decide what seeds to plant, what pesticides to use. Most have turned to dicamba just in the past two years because weeds have become resistant to other herbicides. And the big seed company Monsanto, now owned by Bayer, created a new generation of genetically modified soybean and cotton plants. They can tolerate dicamba, which means farmers can spray this chemical and the weeds die, but the crops are fine.

HAMLIN: They have to have a tool to control their weeds, or they can't farm, you know?

CHARLES: But dicamba has a problem. Sometimes it vaporizes in the heat and drifts across the landscape. It's damaged other crops, caused battles between farmers, lots of controversy. What's received less attention, though, is the damage to wild plants, the vines in random ditches or trees. A few miles from Reelfoot Lake, I take a little drive with Greg Allen, an agricultural extension agency with the University of Tennessee. It's a country road. On our right - a big field of soybeans. On our left - woodland.

So you have to tell me what catches your eye.

GREG ALLEN: OK. Well, one thing would've caught my eye is that sycamore and them little bitty leaves.

CHARLES: Sycamore leaves normally are wide and flat. These are turned into the shape of a cup. It's the signature of exposure to dicamba.

ALLEN: And you see it goes all the way to the top. That's 30-, 40-foot tree.

CHARLES: I realize almost every sycamore tree here shows this kind of damage. Other kinds of trees, though, don't. And it varies from state to state, too. In Iowa, forestry experts haven't found much damage. In Arkansas, though, a scientist that state officials hired to conduct a survey found signs of dicamba on trees in every town that he visited. And the EPA has to decide by the end of the year what to do about this, whether to let farmers keep using dicamba on their crops.

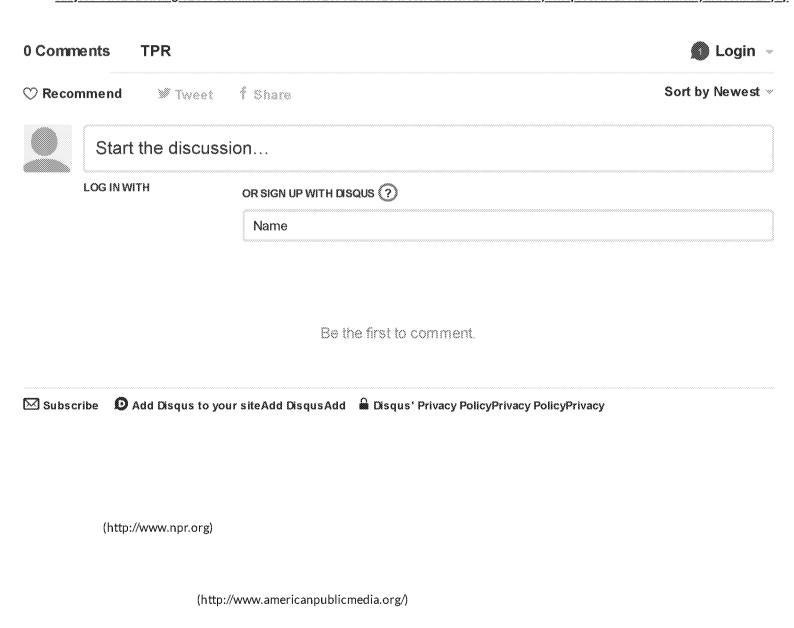
There are billions of dollars at stake. Monsanto's arguing the government cannot take this tool away from farmers. They need it. If used properly, the company says, it doesn't hurt anything but the weeds. Back at Reelfoot Lake, Mike Hayes says his brown cypress trees show the opposite. He thinks state politicians are ignoring the problem partly because they're scared of Monsanto.

HAYES: The problem with dicamba - there's so much money behind it. I've never seen so many people run from a problem so bad in my life. I mean, it really, really hurts to lose something like we're about to lose.

CHARLES: Dicamba hasn't killed the trees, he says, but with time it could. And new ones can't sprout and grow out there in the water. If these cypress trees die, they're gone forever. Dan Charles, NPR News. Transcript provided by NPR, Copyright NPR.

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Holivie จางใช้เพราจ Feed Mill Fire in Texas Forces Residents to Evacuate

#### Feed Mill Fire in Texas Forces Residents to Evacuate

September 27, 2018

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The Valley Feed Mill in Winnsboro, TX. Image courtesy of Google Maps

A fire at a feed mill in Winnsboro, TX on Tuesday prompted officials to order those living within a half-mile of the facility to evacuate their homes amid concerns that smoke and burning ammonium nitrate could cause harm, the City of Winnsboro said in statement.

Emergency crews responded to the Valley Feed Mill on East Coke Road at about 12:15 p.m., and officials issued an evacuation order at about 1:30 p.m., the *Tyler Morning Telegraph* reported. Officials told local media that the fire involved ammonium nitrate, a chemical used in fertilizers.

Firefighters from several municipalities, a HAZMAT team, and staff from the Wood County Emergency Management/Fire Marshall, Texas Commission on Environmental Quality (TCEQ) and the U.S. Environmental Protection Agency (EPA) also reported to the scene.

The blaze produced a yellow cloud of smoke that carried a chemical smell, according to a report by ABC News affiliate KLTV. Air quality around the Valley Feed site was monitored for harmful releases of chemicals and other toxins. On Wednesday morning,

officials revoked the evacuation order and allowed residents to return to their homes.

Winnsboro City Administrator Craig Lindholm told CBS News affiliate KYTX that the although the amount of ammonium nitrate released by the fire is not considered toxic, the chemical could cause respiratory issues and irritation.

No injuries were logged during the incident.

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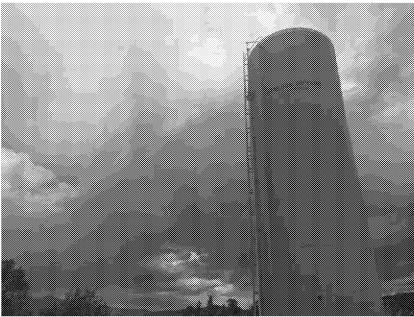
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# After Ranchos water failure, 'don't bother us anymore'



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#### Cody Hooks

The Ranchos de Taos MDWCA system serves 750 people. One of three pumps in the system failed Sept. 16 and service was not fully back to normal until the following Sunday (Sept. 23).

Posted Thursday, September 27, 2018 1:30 pm

#### By Cody Hooks chooks@taosnews.com

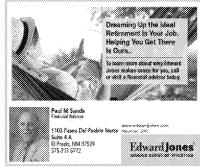
Following a weeklong water outage in Ranchos de Taos that left up to 750 people with little or no water, the leadership of the small water system is keeping quiet about details surrounding the outage.

The issue started with a pump failure Sunday (Sept. 16) and lasted until approximately the following Sunday (Sept. 23), according to the spokesperson for the New Mexico Environment Department.

Local leaders of the water system were far less available to talk about the issue.

The Taos News repeatedly attempted to contact Bernabe Struck, administrator for the Ranchos de Taos MDWCA. An unnamed family member provided some details during the outage, but Struck never returned phone calls requesting comment.

When The Taos News again tried to call Struck Tuesday (Sept. 25), a person at his number directed a reporter to call "the state" or the association's lawyer and then hung up. When a reporter called back to ask for the attorney's name or number, the person said, "Don't bother us anymore." The phone line appeared to be disconnected after



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that.

The Taos News reached Jesse Miera, the certified operator of the water system, Tuesday with follow-up questions about the outage. He said the water was restored and a water test came back with clean results. But he would not elaborate on the results of the test and then hung up on the reporter.

However, the state responded to a request for details.

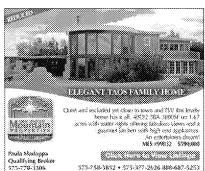
The environment department was alerted of the issue by a "complaint from a customer that the water system was not responsive to their calls and they had water pressure issues," according to spokesperson Katy Diffendorfer.

"A submersible pump in one of the three wells that provide water to the Ranchos de Taos MDWCA water system failed," she wrote in an email. "Due to the lack of operation of one of the three supply wells...the remaining two wells were unable to meet customer water demand, and as a result, portions of the Ranchos de Taos MDWCA water system experienced low water pressure or water outages."

The system serves 750 people, according to state records.

The outage bears resemblance to the near-crisis that befell the town of Taos earlier this year when a municipal pump failed. The El Prado water district twice had to open its system to the town, so water lines didn't depressurize.

But unlike the Questa water crisis during Dec. 2016, when practically the whole village was without water for a month, some businesses in the Ranchos de Taos area got by on what little pressure they had. The Trading Post Cafe struggled to keep up with the dishes because of the low pressure; Del Norte Liquors only needs water for its bathroom and cleaning, so wasn't crippled by the weeklong issue.



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According to the environment department, a replacement pump was installed Friday at the system's second well. State records show the well is located near the junction of state Roads 68 and 518. That well is 185 feet deep and pumps 40 gallons per minutes.

Another well is located near the Giant gas station in Ranchos, while a third is located near La Morada Road in Ranchos de Taos.

Diffendorfer said the microbiological test collected Saturday (Sept. 22) came back negative for bacteria and that water pressure was restored by Sunday afternoon. As of Tuesday morning, a voluntary precautionary boil advisory is still in place but may be lifted soon.

State records indicate the Ranchos water system had a compliance issue in March with the ground water rule, a federal standard meant to "reduce disease incidence associated with harmful microorganisms in drinking water," according to the EPA. The water system was in compliance by May.

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#### Bloomfield contracts with firm for wastewater facility designs

Hannah Grover, Farmington Daily Times Published 2:50 p.m. MT Sept. 27, 2018

#### EPA has ordered city to have designs finished by next year



(Photo: Daily Times file photo)

BLOOMFIELD — The city of Bloomfield is contracting with an Albuquerque-based engineering firm for designs of the new wastewater treatment plant, which the city must build under an administrative order from the U.S. Environmental Protection Agency.

The administrative order requires the city to have the final designs completed by next year, according to Bloomfield public works director Jason Thomas.

Thomas presented the agreement with Bohannan Huston Inc. to the City Council on Monday. The council

unanimously approved it.

The EPA administrative order was issued in 2017. Thomas said the initial assumption was that the city could reuse existing structures and retrofit the plant with a new treatment process. That has since changed.

"We found most of the structures — the rectangular basins — are not reusable, and we have to build a new secondary treatment structure," Thomas said. "So the scope of the project has changed."

He said the current deadline for submission of the final designs is February, but the city will need to renegotiate a different deadline because he does not anticipate the designs will be done by then. He anticipates that Bloomfield will meet the 2024 deadline for construction of the new facility if it is able to find funding for the multimillion-dollar project. The construction of the new facility is estimated to cost \$9.5 million.

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Bloomfield is planning on applying for funding for construction from the New Mexico Environment Department's Clean Water Revolving Loan Fund, as well as the U.S. Department of Agriculture.

Bohannan Huston also will help the city apply for grants and loans to fund the construction of the new plant.

"Right now, my opinion is that we won't be able to get full funding and that we are going to be looking at a (sewer) rate increase for the final construction," Thomas told the City Council.

The city is paying for the designs using about \$725,000 of capital outlay money and nearly \$63,000 from the capital equipment fund. The revenue from the fund comes from a \$1 monthly fee charged for every sewer connection within the city of Bloomfield, according to Thomas.

The design also will include an option for wastewater reclamation to provide irrigation to parts of the city. The infrastructure is already in place along U.S. Highway 64 to irrigate the landscaping using reclaimed wastewater.

Hannah Grover covers government for The Daily Times. She can be reached at 505-564-4652 or via email at hgrover@daily-times.com.

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#### **WESTLAW NEWS**

SEPTEMBER 27, 2018 / 3:56 PM / UPDATED 15 HOURS AGO

# Lawsuit challenges EPA approval of Oklahoma's coal ash program

Dena Aubin



Three environmental groups have asked a federal court to vacate the Environmental Protection Agency's approval of a state-run coal ash permit program in Oklahoma, arguing that the state's program will not adequately protect the environment.

States are entitled under a 2016 federal law to create their own coal ash regulation programs in lieu of operating under federal rules, but Oklahoma's program would allow unsafe coal ash pits to continue operating, Waterkeeper Alliance and two other groups said in a lawsuit filed on Wednesday in Washington, D.C. federal court.

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#### "WOTUS": A Tale of Two Rules While Litigation and Rulemaking Continue

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#### Thursday, September 27, 2018

On August 16, 2018, the U.S. District Court for the District of South Carolina issued a nationwide injunction on a Trump administration rule that has been preventing the 2015 rule that revised the definition of "waters of the United States" ("WOTUS Rule") under the Clean Water Act ("CWA") from taking effect. In *South Carolina Coastal Conservation League v. Wheeler*, the Court held that the Trump administration violated the Administrative Procedure Act ("APA") in promulgating the so-called "Suspension Rule," which delayed implementation of the Obama-era WOTUS Rule for two years. As a result, the 2015 WOTUS Rule applied in twenty-six states and Washington D.C.

Immediately after this decision was issued, states then exposed to the WOTUS Rule filed for injunctions against the WOTUS Rule in two other related cases. On September 12, 2018, a temporary injunction was issued in the U.S. District Court for the Southern District of Texas and on September 18, 2018, an additional state was added to an existing preliminary injunction in the U.S. District Court for the District of North Dakota. The WOTUS Rule currently applies in twenty-two states and Washington D.C., while litigation over both the WOTUS and Suspension Rules continues.

#### Background

In 2015, the U.S. Environmental Protection Agency ("EPA") and U.S. Army Corps of Engineers ("Corps") issued their WOTUS Rule. redefining the scope of waters and wetlands subject to federal jurisdiction under the CWA.

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of the Supreme Court's *Rapanos* decision in 2006 and several iterations of failed guidance attempting to interpret that decision.

The WOTUS Rule was challenged in a number of federal district and appellate courts. Many of those cases were consolidated before the Sixth Circuit, which issued a nationwide stay on implementation of the rule. On January 22, 2018, the United States Supreme Court ruled that federal circuit courts of appeal lack jurisdiction to consider the agencies' rulemaking, resulting in the Sixth Circuit vacating the nationwide stay. This caused the WOTUS Rule to go into effect immediately in all but thirteen states, which were already subject to a preliminary injunction issued by the U.S. District Court for the District of North Dakota. *See North Dakota v. EPA*, 127 F. Supp.3d 1047 (D.N.D. 2015).

In March 2017, President Trump issued an Executive Order instructing EPA and the Corps to reconsider the WOTUS Rule. On February 6, 2018, the agencies promulgated the Suspension Rule, under which they formally delayed implementation of the WOTUS Rule until 2020 and reinstated the regulatory definition of "waters of the United States" that was applicable prior to issuance of the WOTUS Rule. Several states and environmental groups immediately filed suit challenging the rule.

(For additional background, see "Supreme Court Decides Landmark Wetlands Cases," "EPA, Army Corps Propose Expansive Rule Redefining CWA Jurisdiction," and "EPA, Army Corps Redefine Clean Water Act Jurisdiction.")

#### Suspending the Suspension Rule

The federal district court in South Carolina was the first to adjudicate the legality of the Suspension Rule. In S.C. Coastal Conservation League, the Court held the government violated the APA by failing to provide a "meaningful opportunity for comment" on the Suspension Rule. The Court explained that, when proposing the Suspension Rule, EPA and the Corps solicited comments only as to whether the effective date of the WOTUS Rule should be amended. The agencies did not solicit or consider input on the merits of the WOTUS Rule or its predecessor, which they sought to reinstate.

The Court found that, in the context of issuing a rule to suspend the effective date of a targeted rule and reinstate an earlier regulation, an agency's failure to evaluate the targeted rule's substance and merits amounts to a content restriction that is "so severe in scope that . . . the opportunity for comment cannot be said to have been a meaningful opportunity." The Court therefore found the Suspension Rule arbitrary and issued a nationwide injunction vacating the rule. The Court acknowledged the implications of issuing a nationwide injunction and considered the geographic scope of the injunction in its ruling, ultimately concluding that because the effect of the Suspension Rule has impacts across the United States a nationwide injunction was necessary to provide complete relief. Parties have already appealed the Court's injunction.

#### **Implications**

The injunction of the Suspension Rule continues the debate over the appropriate scope of federal jurisdiction under the Clean Water Act. It means that the Obama-era WOTUS Rule is now the law of the land in twenty-two states and Washington D.C., while the regulatory definition of "waters of the United States" that it replaced remains in effect in the other twenty-eight. As a result, the WOTUS Rule is now the jurisdictional standard everywhere except Alabama, Alaska, Arizona, Arkansas, Colorado, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Montana, Nebraska, Nevada, New Mexico, North Carolina, North Dakota, South Carolina, South Dakota, Texas, Utah, West Virginia, Wisconsin, and Wyoming.

For the time being there are two different regulatory standards for determining the scope of federal jurisdiction

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#### **Drought lingers across New Mexico**

By Maddy Hayden / Journal Staff Writer

Friday, September 28th, 2018 at 12:05am

#### NM DROUGHT CONDITIONS as of Sept. 25, 2018 No Paton Taos drought Farmington Abnormally dry О • Tucumcari Moderate drought Albuquerque llovis Severe drought Socorro Extreme Ruidoso drought Silver Exceptional Alamogordo Hobbs City drought Las Cruces Carisbad Lordsburg SOURCE: USDA Drought Monitor **JOURNAL**

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The Rio Grande is again looking puny where it crosses through Albuquerque as persistent drought continues to afflict the Southwest.

Flows on Thursday afternoon were at 133 cubic feet per second, below the historical Sept. 27 average of 410 cubic feet per second.

But water groups around the state have pulled together to keep it flowing, at least until the end of the water year.

"The river's going to be pretty stable the way it is right now," said David Gensler, a hydrologist with the Middle Rio Grande Conservancy District. "They have enough, I believe, to get through the end of October, if need be."

John Fleck, director of the University of New Mexico's Water Resources Program, said natural flows of the Rio Grande dried up in July, and it's still flowing only because of water from the San Juan-Chama Project, which allows for the transport of Colorado River Basin water to supplement the Rio Grande.

"It's a reminder of how important this project is for New Mexico's water supply," Fleck said.

The Rio Grande is in dire straits throughout its run from Colorado through New Mexico, Fleck said.

Levels at Embudo, in north-central New Mexico, have reached record lows this year.

In south-central New Mexico, near Truth or Consequences, Elephant Butte Reservoir is at just 3 percent capacity.

Other rivers in the state are also struggling.

The Animas River at Farmington, an area in exceptional drought, is just above zero flow – the lowest level in the area station's history.

Eric Frey, sport fish program manager for the New Mexico Department of Game and Fish, said the agency investigated 18 fish die-offs this year.

"In a 'normal' year, we typically investigate about 8 to 10 reports of fish kills/die-offs," Frey wrote in an email.

Frey said this year's die-offs due to low water levels have occurred in the Chama, Brazos, Mora and Pecos rivers, as well as various lakes and ponds around the state.

During a conference call Tuesday on drought conditions in New Mexico, Royce Fontenot, a senior hydrologist with the National Weather Service, said precipitation has helped ease some drought in the eastern part of the state since last month.

But just 0.22 percent of the state is drought-free. The exceptional drought area in the northwestern corner of the state showed a little growth, with more than 15 percent of the state now in the worst class of drought.

With most of the state's reservoirs pushed to their limits to cover damage done by last winter's dismal snowpack, another bad snow year would leave water users without a fallback next year, Gensler said.

"I was hoping we wouldn't be going into winter like this, but I think this is where we're going to start winter," Fontenot said.

Fontenot said there's a 65 to 70 percent chance of an El Niño weather pattern moving in during the coming months, which typically brings more precipitation.

But even if El Niño does arrive, it isn't certain which areas it will affect and how much precipitation it'll bring.

"It's not a blanket term anymore," said Chris Romero, a snow survey hydrological technician with the U.S. Department of Agriculture's Natural Resources Conservation Service in Albuquerque. "We had an El Niño forecast here two years ago, and it was great for about two months until the jet stream moved farther north and winter kind of turned off."

Contact the writer.

#### Pro Football

Jared Goff shows his command in Rams' 38-31 win over Vikings

Vikings' Cousins has another 400-yard game but no win

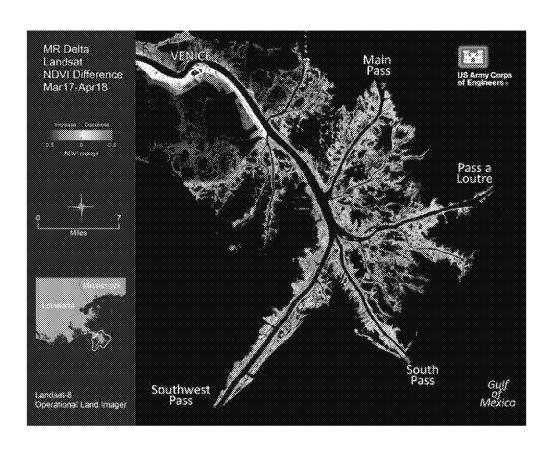
Goff has 465 yards, 5 TDs, propels Rams past Vikings, 38-31

Sherman still in boot, dealing with strained left calf

#### LOUISIANA ENVIRONMENT AND FLOOD CONTROL

# Wetland damage from roseau cane plague visible in satellite images

Updated 5:00 AM; Posted 5:00 AM



This satellite image shows the vegetation health trend in the lower Mississippi River Delta between March 2017 and April 2018. Yellow and red indicate declining health. The delta's dominant plant - roseau cane - has been attacked by a foreign pest. (U.S. Army Corps of Engineers)



20 shares

#### By Tristan Baurick, tbaurick@nola.com

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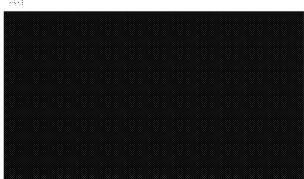
NOLA.com | The Times-Picayune

About half of the sprawling marshland in the lower Mississippi River Delta has weakened or died in recent months, according to an <u>Army Corps of Engineers</u> assessment of the <u>roseau cane die-off</u> plaguing south Louisiana.

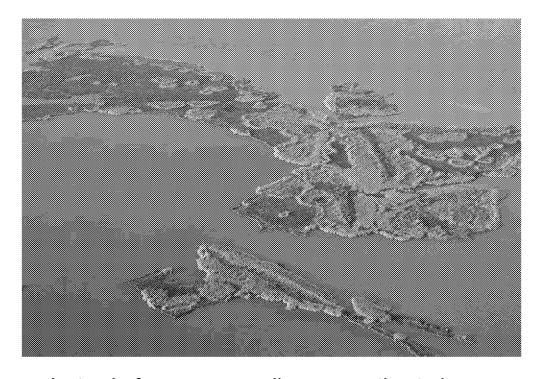
Using high-resolution satellite imagery, the corps assessed the changing health of plant life in the wetlands south of Venice, in what's known as the bird's foot delta. The area is dominated by roseau, a hardy reed that's been dying at an unprecedented rate since 2016. The most likely culprit is the roseau cane scale, a foreign insect that has swarmed across Louisiana's coastal marshes and sucked the life out of the flood- and erosion-resistant plant.

"Concurrent with the insect invasion, many previously healthy stands have died or experienced stunted growth, resulting in conversion to (other) species and open water," the assessment, released this month, says.

It matches what state scientists have been tracking in the field.



"It's not surprising to see what they show in their images," said Vaughan McDonald, a state <u>Department of Wildlife and Fisheries</u> biologist. "That's what we're seeing on the ground as well. This does puts things in perspective (and) shows how big an issue this is."



A stand of roseau cane dies, converting to bare soil and open water in the lower Mississippi River delta in February 2018.



Roseau is considered the lower delta's best natural defense against storms, sea level rise and other factors contributing to Louisiana's land loss crisis.

The corp's most recent satellite analysis shows about half of the delta's marshland suffered declines in vegetation health between March 2017 and April. The corps wasn't able to differentiate between plant types, but scientists estimate roseau constituted 80 to 90 percent of the bird's foot delta plant life before the die-off began two or three years ago.

Weakening plant health was most pronounced on the delta's east side, along Main Pass, Pass a Loutre and South Pass - areas that are part of Wildlife and Fisheries' Pass a Loutre Wildlife Management Area and the neighboring Delta National Wildlife Refuge, which are a combined 165,000 acres. Scientists have estimated the scale has damaged about 80 percent of land in both wildlife areas.

Along Southwest Pass, through which nearly all ocean-going ships enter and exit the Mississippi, the declines were patchy. Some areas showed increased health, but that's not necessarily good news. It could mean weaker plants are replacing roseau.





On the hunt for invasive scale insects with @beecycles, @brettdukephoto and Port Eads' Robert Perez at the mouth of the Mississippi River. Found the bug and dying roseau cane everywhere.

10:30 AM - Jul 26, 2018

1 See Tristan Baurick's other Tweets

"As roseau dies, some areas turn to water or we're getting elephant ear, hyacinth and other plants," said Andy Nyman, a Louisiana State University wetland ecologist.

Elephant year, also known as wild taro, and water hyacinth are invasive plants that do little or nothing to protect the state's coastal marshes. Both are pushovers when confronted with strong waves and wind, and can't tolerate heavy doses of saltwater. Roseau can withstand changes in salinity and water levels, and is anchored by tangles of thumb-thick roots. Its dense stalks help build land by combing out silt and sand from the river.

The corps, which manages the river's navigation channels, warns that declining roseau health could impact shipping.

"There are five federal navigation channels and four ports in the impacted area," the assessment says. "Southwest Pass, for example is a primary shipping channel in the United States and could face increased wave action if the (roseau cane) marsh lining the channel should collapse."



A boat passes roseau cane in Delta National Wildlife Refuge south of Venice in June 2017.

The corps also notes other "potential negative impacts" from the die-off, including flooding, erosion and storm-related damage.

Wildlife and Fisheries recently determined that the <u>die-off</u> caused some passes to retreat by as much as 1,000 feet over a few months.

The corps plans to work with state and university scientists to expand the use of satellite imagery and remote sensing data.

"This is a good place to start, and a good way to prioritize where we need more information," said Molly Reif, a corps geographer who worked on the assessment.

The corps' tools for assessing satellite imagery could be used on a wider area of south Louisiana. Surveys conducted by the <u>LSU AgCenter</u> indicate the scale has appeared on roseau in New Orleans, Baton Rouge and several coastal parishes. It also popped up in east Texas and the Bay St. Louis area of Mississippi. Satellite imagery could help assess the number of acres affected by the die-off, which remains limited to guesswork, and measure the conversion of roseau marsh to water.

Local scientists hope to work with the corps to monitor how different roseau varieties react to the scale. The most plentiful roseau type, known as delta roseau, is most susceptible to the die-off. European roseau, an aggressive invader that pushes out other plant species, seems to be doing fine, and could be used to recolonize infested areas. The downside is that expensive control measures would be needed to keep European roseau in check.

Nearly two years after first raising the alarm about the die-off, scientists still know of no way to stop it. Their initial response was to focus on the scale, which are native to cool-weather marshes in China and Japan. It's unclear how or when the scale arrived in Louisiana, where the grain of rice-sized insect has thrived thanks to long summers, mild winters and plentiful stands of roseau. Scientists unsuccessfully tested several chemical bug killers. They have little faith in the use of fire to burn infested roseau stands, as is done in China. Controlled burns in marshy areas would require chemical accelerants that might contaminate water and harm wildlife. Roseau areas in the lower delta are also loaded with oil pipelines and wells, which could catch fire or explode.

Lately, as federal and state funding has trickled in to assist in combating the die-off, scientists have broadened their research to look at other possible underlying causes, including plant and soil diseases and <u>fluctuations in water levels</u>. They hope to find out whether other factors may have weakened the roseau, making it vulnerable to the scale.

Rodrigo Diaz, an AgCenter entomologist, said the corps' assistance will jump-start several research initiatives.

"These are really exciting tools they have," he said. "We've been looking at all this in boats with a very narrow view. But with the satellite (imagery), we get a massive perspective over thousands and thousands of acres."

<u>Tristan Baurick</u> covers Louisiana's coastal environment for NOLA.com | The Times-Picayune. Email: <u>tbaurick@nola.com</u> \* Twitter: <u>@tristanbaurick</u> \* Facebook: <u>Tristan Baurick</u> and Louisiana Coastal Watch.

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